



Marko Pacak

Senior Data Engineer

Basel, CH - info@markopacak.com - 0041 (0) 77 484 56 16

2023-6
present

• Senior Data Engineer / Project Lead (Platform, Cloud & Analytics)

RoomPriceGenie AG - Remote, Zug (CH), Mannheim (DE)

[Snowflake](#), [DBT](#), [Terraform](#), [AWS](#), [Polars](#), [Pandas](#), [Postgresql](#), [cube.dev](#), [Django](#), [Datadog](#)

- Responsible for the reporting tool accessible to 1000+ pro client
- Maintained multiple versions of the data pipeline in production and developed new reporting calculations
- Drastically improved performance of reporting calculations with pre-calculated snapshots and aggregates tables; later served analytical data with semantic layer (cube.dev)
- Introduced data-contracts so multiple engineers can start working on their part of the pipeline in parallel
- Centralized business transformations in one location, which enabled us to use AI to draft transformations code in DBT / SQL
- Restructured data pipeline with full transformations in Snowflake/DBT
- Developed Terraform / AWS modules for supporting Dagster (demo on github)
- Coached team-members on Kimball design, DBT, Terraform, AWS...
- Introduced Athena, Glue Catalog / Jobs, Delta-Tables on AWS (demo on github)
- Developed complex data integration that led to highest revenue month in company history (Newbook PMS: opened the Australian market)
- Set up monitoring dashboards and alerts in Datadog and Snowflake
- Management: technical and team-fit interviews, performance reviews, conflict resolution, workshops, calls with Snowflake consultants

2022-9
2023-6

• Senior Cloud & Data Engineer

Galeria Kaufhof Karstadt - Remote, Essen (DE)

[AWS](#), [Terraform](#) [Python](#), [Nodejs](#), [Docker](#), [Jenkins](#), [Datadog](#)

- Responsible for data transformation pipeline and multiple analytics calculations used in production (Terraform, SQS, S3, Lambda, Glue, Spark, Step Functions, Redshift)
- Introduced Data Quality Checks for identifying anomalies in items stock data
- Managed a team of external consultants
- Maintained Jenkins pipeline automating build/push of containers to EC Registry
- Set-up monitoring views and automated alerts in Datadog and AWS Cloudwatch

2020-9
2022-9

• Senior Cloud & Software Engineer

NextBigThing AG - Berlin (DE)

[AWS](#), [Terraform](#), [IoT](#), [Python](#), [Docker](#), [Django](#), [SQLAlchemy](#), [Pandas](#), [Grafana](#)

- Developed real-time ETL pipelines for ingesting and processing sensors event data (IoT Core, Kinesis Streams, Lambda, Pandas, S3, DuckDB), with peaks of 2K requests / second
- Developed API Services (Django/Flask, AWS API Gateway, Lambda, EC2, AutoScaling, Redis)
- Managed and improved CI/CD pipelines (GitLab CI, AWS CodePipeline)
- Introduced Terraform to the company and moved from ClickOps to IaC

Personal Information

nationality Swiss

date of birth 01.06.1991

linkedin [/in/markopacak](#)

github [/markopacak](#)

stackoverflow [/users/8524301/payloc91](#)

Languages

Italian

native / bilingual

English

full professional proficiency

German

professional working proficiency

Bosnian / Serbo-Croatian

native, bilingual

French

basic skills

Management Experience

Project Management and Milestones

Prioritization and alignment with Product

Technical and team-fit interviews

Performance Reviews

Conflict Resolutions

Workshops and Coaching

Retros

Side-gigs and hobbies

Hiking Groups Guide and Organizer

All-round-help and snowboard instructor assistant for scout kids

Music Producer and DJ

Contributions (see github)

[numpy/numpy](#)

[pandas-dev/pandas](#)

[pytest-dev/pytest](#)

- **Freelance Software & Cloud Engineer**
 - 2020-6
 - 2021-9
 - Bryter GmbH - Remote, Frankfurt (DE)
 - [AWS, Openfaas, Kubernetes, Java, Kotlin, Python](#)
 - Developed the Bryter state-machine platform
 - Integrated 3rd party APIs: DocuSign, iManage, British commerce register...
 - Mentored external developers on how to use the framework
- **Software Engineer**
 - 2020-1
 - 2021-9
 - Auxolar GmbH and Next Big Thing AG - Remote, Berlin (DE)
 - [AWS, IoT, Django, Python, Pandas, C++](#)
 - Developed calculations of energy consumption and generation (AWS Lambda/EC2)
 - Prepared data models for data scientist
 - Developed embedded software (Python, METR M-Gate, Raspberry)
- **Software Engineer**
 - 2018-6
 - 2019-12
 - Assetmax AG - Remote, Zurich (CH)
 - [AWS, Java, Python, Pandas, IT-Security](#)
 - Assetmax AG - Lugano, Zurich (CH)
 - [AWS, Java, Python, Pandas, IT-Security, Postgresql](#)
 - Migrated home-made web-framework to Spring web-services
 - Automated deployment the Assetmax software in banking systems
 - Developed financial calculations and asset reporting (Java/Python, Lambda, EC2)
 - Managed an external team of front-end engineers
 - Integrated authentication protocols with banking networks: OAuth, Kerberos, SPNEGO, ...
 - Developed data extraction with Bloomberg, SIX, ...
 - Ran penetration attacks and hardened systems deployed in clients network: worked with one of the largest IT-Sec companies in Europe
 - Wrote tooling / scripts to automate the release of the Assetmax software within banking networks (Python scripting / tooling)
 - Database optimization
- **Pricing Management Assistant**
 - 2013-1
 - 2013-9
 - EFG Bank - Lugano (CH)
 - Strategic and Operative Pricing Management
 - Automated processes and queries on the banking platform Avaloq

Education & certifications

- **Bachelor of Science in Computer Science and Engineering**
 - 2013-9
 - 2017-1
 - University of Applied Sciences of Southern Switzerland (SUPSI) - Lugano (Switzerland)
 - BA thesis: Real-time streaming of video content over UDP/TCP using the gstreamer (C++) framework
 - Supervisor: Prof. Leidi Tiziano
- [AWS Certified Developer Associate](#)
 - Credential number: Y5SHLSTC5JV41DWD
- [DeepLearning.AI Tensorflow Developer Specialization](#)
- [DeepLearning.AI Deep Learning Certification](#)